



Significant Incident Report No. 266

Subject: Underground operator struck on the head by a high pressure air line

Date: 23 August 2018

Summary of incident

Investigation into this incident is ongoing. The information contained in this significant incident report is based on material received, knowledge and understanding at the time of writing.

In August 2018, a service crew was extending air and water services underground. Upon re-energising the lines, it was noticed that the water line was not connected properly and was leaking. While the water line was being repaired, the adjacent pressurised air line disconnected at the coupling of a poly fitting and steel isolation valve.

The failure of the coupling caused the air line to whip around, breaking a holding chain and striking a service crew operator in the head. The operator collapsed and lost consciousness. He was stabilised and transported to hospital for treatment of concussion and lacerations to his head.

Direct causes

The operator was in the line of fire when the coupling on the air line failed.



View of the failed coupling.

Contributory causes

- The coupling used to connect the poly pipe was not fit-for-purpose.
- The coupling supplier could not provide the requested coupling normally used and recommended an alternative as being fit-for-purpose with the fittings and adapters in use. The recommendation was made without adequate assessment.

- When the coupling failed, a large section of the line started to whip around with sufficient force to break the holding chain. Early investigations indicate that the chain may have been installed too far back from the end of the pipe.
- Underground operators reportedly noticed problems with the coupling before the incident, but did not report their concerns to their supervisors.



View of the failed chain installed to secure the air line to the backs.

Actions required

The following actions are recommended to prevent similar incidents.

- Review couplings currently in use for connecting services to confirm they are fit-for-purpose.
- Review procurement policies and procedures to confirm that new plant is assessed as fit-for-purpose by a competent person before being made available for use.
- Confirm services are adequately secured to prevent their uncontrolled release.
- Remind workers to raise any concerns about equipment, particularly if it is new to the site.
- Research sources of information for past incidents, product alerts and worker reports when conducting hazard identification and risk management.

Further information

- Business Queensland, www.dnrme.qld.gov.au/business/mining/safety-and-health/alerts-and-bulletins/mines-safety/incorrect-use-of-victaulic-flexible-coupling-sc-77

Mines safety alert 267 – Incorrect use of Victaulic flexible coupling SC 77 (2011)

This Significant Incident Report was approved for release by the State Mining Engineer on 23 August 2018